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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,130	12/18/2001	Mathew A. Rybicki	VIXS 034	5129
34280	7590	03/29/2005	EXAMINER	
TIMOTHY W. MARKISON			TSE, YOUNG TOI	
VIXS, INC.			ART UNIT	
P.O.BOX 160727			PAPER NUMBER	
AUSTIN, TX 78736			2637	

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/026,130	Applicant(s) RYBICKI ET AL.	
	Examiner YOUNG T. TSE	Art Unit 2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-18 and 20 is/are allowed.
- 6) ☒ Claim(s) 10, 14 and 15 is/are rejected.
- 7) ☒ Claim(s) 1-9, 11-13, 19 and 21-27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>121801</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first I digital to analog converter, the first Q digital to analog converter, the second I digital to analog converter, and the second Q digital to analog converter, as recited in claim 6 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: on page 3, lines 5-6, "IEEE 802.11" should be "IEEE 802.11a"; on page 13, line 4, "92" should be "92-96"; and on page 16, line 12 and line 26, "128" and "module" should be "28" and "module 160", respectively. Appropriate correction is required.

Claim Objections

3. Claims 1-15, 19, and 21-27 are objected to because of the following informalities:

In the apparatus claims 1-5, 7-15, and 22, each claim element or module should start with "a" or "an". For example, in claim 1 (line 5) and claim 3 (line 6), "signal generator" and "antenna" should be "a signal generator" and "an antenna", respectively.

In claim 2 (line 2), claim 3 (line 2), claim 4 (line 2), claim 9 (line 2), claim 11 (line 2), claim 12 (line 2), and claim 13 (line 2), the word "further" should be deleted.

In claim 5, lines 1-2, "claim 2 further comprises:" should be "claim 2,".

In claim 6, lines 1-2, "claim 5 further comprises:" should be "claim 5,".

In claim 7, lines 1-2, "claim 2 further comprises:" should be "claim 2,".

In claim 8, lines 1-2, "claim 1 further comprises:" should be "claim 1,".

In claim 8, line 15, the word "and" should be deleted.

In claim 19, line 7, "signal;" should be "signal; and".

In claim 21, line 12, the word "and" should be deleted.

In claim 25, line 9, "signal;" should be "signal; and".

In claim 27, line 14, the word "and" should be deleted.

Wherein claims 23-24 and 26 are depended upon claim 22.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 10 and 14-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Wright et al..

Wright et al. (U.S. Patent No. 6,798,843 B1) discloses a power transmitter 50 in Figure 32 comprises a digital compensation signal processing circuit 52, a digital to analog converter 54, an RF upconverter 58, a power splitter 102A, a plurality of amplifiers 60A, a power combiner 102B for transmitting the combined power signal to an antenna, and an adaptive control processing and compensation estimator 70.

With respect to claim 10, the digital compensation signal processing circuit 52 corresponds to the signal generator to generate a transmission protocol; the digital to analog converter 54 corresponds to the digital to analog converter to convert the digital signal into an analog signal; the RF upconverter 58 corresponds to the RF up-conversion section to up-convert frequency of the analog signal; the plurality of

amplifiers 60A correspond to the plurality of amplifiers to amplify the RF signal; and the adaptive control processing and compensation estimator 70 corresponds to the gating signal module to produce control signals to control the plurality of the amplifiers 60A based on at least the signal provided to the digital compensation signal processing circuit 52 and a feedback signal of the combined power signal of the amplifiers 60A.

With respect to claim 14, the power combiner 102B corresponds to the summing module to sum the outputs of the amplifiers 60A and the antenna (not shown in Figure 32 but shown in other figures) corresponds to the antenna for radio transmission.

With respect to claim 15, although Figure 32 does not show a plurality of antennas for the outputs of the amplifiers, Figure 33A shows the plurality of antennas 1-3 for transmitting the outputs of the amplifiers 60.

Allowable Subject Matter

6. Claims 16-18 and 20 are allowed.
7. Claims 1-9, 19 and 21-27 would be allowable if rewritten or amended to overcome the objections set forth in this Office action.
8. Claims 11-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
9. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to show or suggest that a power transmitter comprises signal partitioning circuit to partition a signal based on peak-to-average ratio of the signal to

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produce a plurality of signal partitions; a signal processing circuit to process each of the plurality signal partitions based on an aspect of a transmission protocol to produce a plurality of processed signal partitions; and a plurality of amplifiers, wherein each of the plurality of the amplifiers amplifies a corresponding one of the plurality of processed signal partitions to produce a plurality of amplified signal partitions to transmit a power amplifier signal to an antenna as a composite amplified signal.

Conclusion

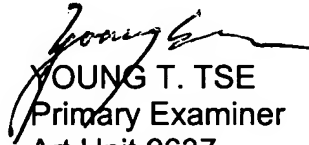
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cimini et al., Long et al., Laroia, Ghanadan et al., and Melsa et al. are made of record as describing a related power transmitter circuit for converting a frequency domain signal into a time domain signal to a plurality of amplifier to generate a plurality of amplified signal to one or a plurality of antennas for transmission.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUNG T. TSE whose telephone number is (571) 272-3051. The examiner can normally be reached on Monday and Wednesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


YOUNG T. TSE
Primary Examiner
Art Unit 2637